

Amendments to the Claims

1. (Currently Amended) A communication system comprising:
plural switching devices, each ~~thereof possessing~~ comprising plural ports;
[[a]] at least one terminal operable to be connected to any ~~one~~ of the plural ports of ~~one of~~
said plural switching devices; and
a management device comprising a configuration information generating unit operable to
generate configuration information of a network composed of said plural switching devices and
~~plural pieces of said~~ at least one terminal,
wherein each of said plural switching devices further comprises a MAC address table
operable to store MAC address information ~~of a source MAC address, the MAC address table being~~
~~assigned to~~ for each of the plural ports, and
wherein at least one of said at least one terminal comprises:
a packet receiving unit operable to receive a packet;
a packet sending unit operable to send a packet;
a link-state detecting unit operable to detect a link-up for each of said plural switching
devices; and
a configuration-change notifying unit operable, when the link-state detecting unit detects
a link-up, to send ~~said management device~~ a notice of a change of a network configuration to said
management device via ~~using~~ the packet sending unit.
2. (Currently Amended) The communication system as defined in claim 1, wherein said
configuration-change notifying unit sends the notice ~~is sent~~ in one or more link-change notifying
packets.

3. (Currently Amended) The communication system as defined in claim 1, wherein said configuration-change notifying unit sends the notice ~~is sent~~ in one or more substitute packets other than ~~the one or more~~ link-change notifying packets.

4. (Original) The communication system as defined in claim 3, wherein the notice sent in the one or more substitute packets includes one of an ICMP message, information of services available at said terminal, and information of a phone number of said terminal.

5. (Currently Amended) The communication system as defined in claim 1, wherein said configuration-change notifying unit sends the notice ~~is sent~~ by at least one of a multi-cast and a broadcast.

6. (Currently Amended) The communication system as defined in claim 1, wherein said management device comprises an information acquiring unit operable, in receipt of the notice from said terminal, to acquire ~~pieces of information of~~ the MAC address information ~~of concerning~~ the ports from said plural switching devices, and

wherein the configuration information generating unit updates the configuration information of the network, based on the ~~pieces of~~ MAC address information acquired by the information acquiring unit.

7. (Currently Amended) The communication system as defined in claim 6, wherein the information acquiring unit acquires ~~information of~~ the MAC address information using an SNMP.

8. (Currently Amended) The communication system as defined in claim 6, wherein the information acquiring unit acquires ~~information of~~ the MAC address information only from said

plural switching devices ~~existing that are~~ in a path from said terminal ~~having that~~ sent the notice to said management device.

9. (Currently Amended) A communication system terminal comprising:
plural switching devices, each comprising plural ports;
at least one terminal operable to be connected to any of the plural ports of said plural switching devices;
wherein each of said plural switching devices further comprises a MAC address table operable to store MAC address information for each of the plural ports, and
at least one of said at least one terminal comprises:
a packet receiving unit operable to receive a packet;
a packet sending unit operable to send a packet;
a link-state detecting unit operable to detect a link-up for each of plural switching devices;
and
a configuration-change notifying unit operable, when said link-state detecting unit detects a link-up, to ~~send a management device~~ output a notice of network configuration change using via said packet sending unit.

10. (Currently Amended) The terminal as defined in claim 9, wherein said configuration-change notifying unit sends the notice of the network configuration change ~~is sent~~ by at least one of a multi-cast and a broadcast.

11. (Currently Amended) A communication system comprising:
plural switching devices, each ~~thereof possessing~~ comprising plural ports; and

[[a]] at least one terminal operable to be connected to any ~~one~~ of the plural ports of ~~one~~ of said plural switching devices,

wherein at least one of said at least one terminal comprises:

a packet receiving unit operable to receive a packet;

a packet sending unit operable to send a packet;

a link-state detecting unit operable to detect a link-up for each of said plural switching devices;

a resource reservation table operable to store network resource reservation information of said terminal and a communication ~~partner's~~ partner terminal; and

a configuration-change notifying unit operable, when the link-state detecting unit detects a link-up, to send ~~the communication partner's terminal~~ a notice of the network resource reservation information stored in the resource reservation table to the communication partner terminal via ~~using~~ the packet sending unit.

12. (Currently Amended) The communication system as defined in claim 11, wherein said configuration-change notifying unit sends the notice of the network resource reservation information ~~is sent~~ by at least one of a multi-cast and a broadcast.

13. (Currently Amended) The communication system as defined in claim 11, wherein said configuration-change notifying unit sends the notice of the network resource reservation information ~~is sent~~ only to the communication ~~partner's~~ partner terminal stored in the resource reservation table.

14. (Original) The communication system as defined in claim 11, wherein securing network resource based on the network resource reservation information is practiced by an RSVP.

15. (Currently Amended) A communication system comprising:

plural switching devices, each ~~thereof possessing~~ comprising plural ports;

[[a]] at least one terminal operable to be connected to any ~~one~~ of the plural ports of ~~one of~~ said plural switching devices; and

a management device comprising a network resource management table operable to store network resource reservation information of a network, the network comprising said plural switching devices and ~~plural pieces of~~ said at least one terminal, said management device further comprising a network resource managing unit operable to manage resources of the network,

wherein at least one of said at least one terminal comprises:

a packet receiving unit operable to receive a packet;

a packet sending unit operable to send a packet;

a link-state detecting unit operable to detect a link-up for each of said plural switching devices;

a resource reservation table operable to store network resource reservation information between said terminal and a communication ~~partner's~~ partner terminal; and

a configuration-change notifying unit operable, when the link-state detecting unit detects a link-up, to send ~~said management device~~ a notice of the network resource reservation information stored in the network resource management ~~table, using~~ table to said management device via the packet sending unit.

16. (Currently Amended) The communication system as defined in claim 15, wherein the network resource managing unit of said management device is operable to generate reservation availability information indicating availability of a network resource reservation requested by said terminal, after examining the network resource reservation information received from said terminal, the network resource managing unit updates the network resource reservation information stored in

the network resource management table, based on the reservation availability information, and the network resource managing unit sends notice of the reservation availability information to said terminal and [[a]] the communication partner's partner terminal.

17. (Currently Amended) A terminal comprising:
a packet receiving unit operable to receive a packet;
a packet sending unit operable to send a packet;
a link-state detecting unit operable to detect a link-up for each of plural switching devices;
a resource reservation table operable to store network resource reservation information of said terminal and a terminal of a communication partner of said terminal; and
a configuration-change notifying unit operable, when said link-state detecting unit detects a link-up, to send a notice of the network resource reservation information stored in said resource reservation table to the terminal of the communication partner.

18. (Currently Amended) The terminal as defined in claim 17, wherein said configuration-change notifying unit sends the notice of the network resource reservation information ~~is sent~~ by at least one of a multi-cast and a broadcast.

19. (Currently Amended) A communication system comprising:
plural switching devices, each ~~thereof possessing~~ comprising plural ports;
[[a]] at least one terminal operable to be connected to any ~~one~~ of the plural ports of ~~one~~ of said plural switching devices, and
a management device operable to manage a network ~~composed by~~ including said plural switching devices and ~~plural pieces of~~ said at least one terminal,

wherein each of said plural switching devices further comprises a MAC address table operable to store MAC address information ~~of a source MAC address, the MAC address table being assigned to~~ for each of the plural ports,

wherein at least one of said at least one terminal comprises:

a packet receiving unit operable to receive a packet;

a packet sending unit operable to send a packet;

a link-state detecting unit operable to detect a link-up for each of said plural switching devices;

a resource reservation table operable to store network resource reservation information between said terminal and a communication ~~partner's~~ partner terminal; and

a configuration-change notifying unit operable to send ~~said management device~~ a notice of a configuration change in the network and notice of the network resource reservation information to said management device,

wherein said management device comprises:

a packet receiving unit operable to receive a packet;

a packet sending unit operable to send a packet;

an information acquiring unit operable to acquire ~~the pieces of information of a~~ MAC address information of ~~concerning~~ the ports from said plural switching devices;

a configuration information generating unit operable to generate configuration information of the network;

a network resource management table operable to store network resource reservation information of the network; and

a network resource managing unit operable to manage a network resource of the network,

wherein when the link-state detecting unit detects a link-up, said terminal sends ~~said management device~~ the notice of the configuration change of the network and the notice of the

network resource reservation information stored in the network resource management table to said management device, and

wherein when said management device receives the notice from said terminal, the information acquiring unit ~~acquire pieces of information of a~~ acquires the MAC address ~~concerning information of the~~ ports from said plural switching devices, the configuration information generating unit updates the network configuration information, based on the ~~pieces of~~ MAC address information acquired by the information acquiring unit, and the network resource managing unit generates reservation availability information indicating availability of a network resource reservation requested by said terminal, after examining the network resource reservation information received from said terminal, the network resource managing unit updates the network resource reservation information stored in the network resource management table, based on the reservation availability information, and the network resource managing unit sends notice of the reservation availability information to said terminal and a communication partner's terminal.

20. (Currently Amended) The communication system as defined in claim 19, wherein said configuration-change notifying unit sends the notice of the configuration change of the network and the notice of the network resource reservation information stored in the network resource management table ~~the notice is sent~~ in one or more link-change notifying packets.

21. (Currently Amended) The communication system as defined in claim 19, wherein said configuration-change notifying unit sends the notice of the configuration change of the network and the notice of the network resource reservation information stored in the network resource management table ~~the notice is sent~~ in one or more substitute packets other than ~~the one or more~~ link-change notifying packets.

22. (Currently Amended) The communication system as defined in claim 19, wherein said configuration-change notifying unit sends the notice of the configuration change of the network and the notice of the network resource reservation information stored in the network resource management table ~~the notice~~ sent in the one or more substitute packets includes one of an ICMP message, information of services available at said terminal, information of a phone number of said terminal, and the network resource reservation information.

23. (Currently Amended) The communication system as defined in claim 19, wherein said configuration-change notifying unit sends the notice of the configuration change of the network and the notice of the network resource reservation information stored in the network resource management table ~~the notice is sent~~ by at least one of a multi-cast and a broadcast.

24. (Currently Amended) The communication system as defined in claim 19, wherein the information acquiring unit acquires the information of MAC address information using an SNMP.

25. (Currently Amended) The communication system as defined in claim 19, wherein the information acquiring unit acquires the information of MAC address information only from said plural switching devices ~~existing that are~~ in a path from said terminal ~~having that~~ sent the notice to said management device.

26. (Original) The communication system as defined in claim 1, wherein said plural switching devices are base stations constituting a wireless LAN, and the link-state detecting unit is operable to detect a change of connection at one of the base stations as a link-up.